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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/652,005	08/29/2003	Darwin Mitchel Hanks	200209014-1	9907
22879 7590 03/19/2008 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400				
EXAMINER				
GOMA, TAWFIK A				
ART UNIT		PAPER NUMBER		
2627				
NOTIFICATION DATE		DELIVERY MODE		
03/19/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/652,005

**Applicant(s)**

HANKS, DARWIN MITCHEL

**Examiner**

TAWFIK GOMA

**Art Unit**

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 9-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This action is in response to the amendment filed on 12/19/2007.

#### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehureau et al (4025784) in view of Tanaka et al (US 6608809) and further in view of McClellan (US 2004/0160510).

Regarding claim 1, Lehureau '784 discloses a method of focus control, comprising: passing a light source beam over a reflectivity change of a storage media and on to a leading photo sensor (5, fig. 3 and fig. 10) and a trailing photo sensor (4, fig. 3 and fig. 10); determining whether the leading photo sensor or the trailing photo sensor had a first change in reflectivity (figs. 4 and 5); if the leading sensor experienced the first change in reflectivity, then adjusting a focus actuator to move a focus lens farther from the storage media (fig. 5 and col. 3 lines 25-32); and if the trailing sensor experienced the first change in reflectivity, then adjusting the focus actuator to move the focus lens closer to the storage media (fig. 4 and col. 3 lines 16-24).

Lehureau discloses that the reflectivity change is from an area of more reflectivity to an area of less reflectivity but fails to disclose wherein the reflectivity change is from reflective to non-reflective areas. In the same field of endeavor, Tanaka discloses a method of detecting marks on a disc wherein the disc has a reflectivity change from reflective to non-reflective (Boundary area,

fig. 3 and col. 5 lines 41-45). It would have been obvious to one of ordinary skill in the art to modify the method disclosed by Leheureau by providing a disc with reflective and non-reflective areas as taught by Tanaka. The rationale is as follows: It would have been obvious to provide for non-reflective instead of the less-reflective areas of Leheureau as it would have been a simple substitution of one known element for another to obtain predictable results.

Further regarding claim 1, Leheureau in view of Tanaka fail to disclose wherein the light source is passed toward a label side of a storage media also having a data side opposite to the label side, and wherein the focus actuator moves the lens to focus on a label side of the media. In the same field of endeavor, McClellan discloses providing a mark on a label face of an optical medium, which has a data face (434, fig. 4) opposite to the label face (416, fig. 4), and wherein a focus actuator moves the lens to focus on the label side of the media (par. 77). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide the reflectivity change taught in Leheureau in view of Tanaka on a label face of a media as in McClellan. The rationale is as follows: One of ordinary skill in the art at the time of the applicant's invention would have been motivated to provide a label face with the reflectivity change marks in order to allow a user to label and identify discs that are created by the user (see McClellan par. 4).

Regarding claim 2, Leheureau '784 discloses a method further comprising: if the trailing sensor and the leading sensor experienced a change in reflectivity at substantially the same time, then leaving the focus lens in a current location (figs. 1 and 6 and col. 1 lines 16-22).

Claims 3-4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leheureau et al (US 4025784) in view of Tanaka et al (US 6608809) and McClellan (US

2004/0160510) as applied to claims 1 and 2 above and further in view of Leheureau (US 2004/0027964).

Regarding claim 3, Leheureau '784 fails to disclose wherein the storage media is selected from the group consisting of compact discs and digital versatile discs. In the same field of endeavor, Leheureau '964 discloses a similar focusing device used for a CD (pars. 4 and 9). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the device disclosed by Leheureau '784 by using it with a CD or DVD as taught by Leheureau '964. The rationale is as follows: One of ordinary skill in the art would have been motivated to use the focusing device for a CD or DVD in order to use a disc with greater storage capacity (see '964, par. 2).

Regarding claim 4, Leheureau '964 further discloses wherein the storage media is a removable storage media (pars. 4 and 9).

Regarding claims 6-8, Leheureau '784 fails to disclose wherein: the leading photo sensor comprises a first pair of photo sensors from a quadrature photo sensor; and the trailing photo sensor comprises a second pair of photo sensors from the quadrature photo sensor. In the same field of endeavor, Leheureau '784 discloses a quadrature photodetector for focusing, wherein a first pair and a second pair are leading and lagging detectors (fig. 12 and par. 61). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the device disclosed by Leheureau '784 with the quad-photodetector disclosed by Leheureau '964. The rationale is as follows: One of ordinary skill in the art would have been motivated to provide a quad-photodetector in order to allow for calculation of a push-pull tracking error signal as well as a focusing error signal with the same detector ('964, par. 61).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Leheureau (US 4025784) in view of Tanaka et al (US 6608809) ) and McClellan (US 2004/0160510) as applied to claims 1 and 2 above and further in view of Freeman (US 6901598).

Regarding claim 5, Leheureau fails to disclose wherein the optical disc is a non-removable disc. In the same field of endeavor, Freeman discloses wherein an optical disc used in a focus mechanism can be either removable or non-removable (col. 1 lines 26-32). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the device disclosed by Leheureau to use with a non-removable disc. The rationale is as follows: One of ordinary skill in the art would have been motivated to use a non-removable disc in order to prevent corruption or damage to a disc used for data storage.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1-8, with respect to the amendments to the claims regarding the label face having the marks have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments with respect to the combination of Leheureau ((US 2004/0027964) in view of Tanaka (US 6608809) have been fully considered, but are not persuasive.

The examiner disagrees with applicant's contention that the rationale provided by the examiner for the combination of Leheureau in view of Tanaka ("it would have been a simple substitution of one known element for another to obtain predictable results"), is not a proper rationale according to *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. \_\_\_, 82 USPQ2d 1385 (April, 30, 2007). The examiner agrees that a rationale must be provided to support obviousness, but disagrees with applicant's interpretation of the *KSR* decision to require that "an examiner must

'identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.'" (Applicant's response, page 9, citing *KSR*, at 15). The relevant section referred to by applicant of the decision in fact reads, "*it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.*" (*KSR*, 550 U.S. \_\_\_\_, 82 USPQ2d at 1396, emphasis added). The court goes on to emphasize that "Helpful insights, however, need not become rigid and mandatory formulas; and when it is so applied the TSM test is incompatible with our precedents." (*Id.*) The *KSR* decision, therefore, rejects the notion that the TSM test is the only rationale that can be provided to render a combination obvious under § 103.

Furthermore, the rationale provided by the examiner, ("it would have been a simple substitution of one known element for another to obtain predictable results"), is in fact explicitly provided for as a proper rationale in the *KSR* decision, contrary to applicant's assertion. (*KSR*, 550 U.S. \_\_\_\_, 82 USPQ2d at 1395, holding that "The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.").

In response to applicant's argument that there is no reason to combine the teachings of Lehreau and Tanaka, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In the instant case, it is clear

that the use of non-reflective sections provided for by Tanaka, would have suggested the use of non-reflective sections in Lehreau as a simple substitute to the less-reflective sections provided in Lehreau.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.



Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAWFIK GOMA whose telephone number is (571)272-4206. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tawfik Goma/  
Examiner, Art Unit 2627

/Joseph H. Feild/  
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